

***Human Dimensions Baseline Assessment
of the 75th Ranger Regiment***

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13. ABSTRACT (Maximum 200 words) Presents the results of a baseline assessment of the 75th Ranger Regiment on the human dimensions of work environment, sources of stress, horizontal and vertical cohesion, and the outcome variables of combat readiness, job satisfaction, Army commitment, and psychological health. The responses of the Rangers on these dimensions were compared to two samples of Infantry soldiers. In comparison to the Infantry units, Rangers reported less stress as a function of work hours and lack of sleep, evidenced higher unit cohesion and vertical cohesion, displayed greater job satisfaction, showed greater job satisfaction, and displayed a much greater level of combat readiness. A platoon-level analysis revealed that platoons in the Ranger Regiment differed on combat readiness and ratings of officer leadership. Furthermore, the platoon-level correlation between ratings of officer leadership and combat readiness was .63. The results establish baseline values for Rangers, so that the effects of future operations can be more systematically examined.				
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TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	4
1. INTRODUCTION.....	6
1.1 Background.....	6
1.2 Statement of the Problem.....	7
1.3 Objectives.....	7
2. METHODOLOGY.....	7
2.1 Human Dimensions Assessed.....	7
2.2 Data Analytic Strategy.....	8
2.3 Data Collection.....	8
3. RESULTS.....	9
3.1 Response Rate and Demographics.....	9
3.1.1. <i>Response Rate</i>	9
3.1.2. <i>Demographics</i>	9
3.2 Work Environment.....	9
3.2.1. <i>Work hours and amount of sleep</i>	10
3.2.2. <i>Sources of stress</i>	10
3.2.3. <i>Task significance</i>	11
3.3 Horizontal and Vertical Cohesion.....	12
3.3.1. <i>Horizontal cohesion</i>	12
3.3.2. <i>Vertical cohesion</i>	13
3.4 Organizational Outcomes.....	14
3.4.1. <i>Perceptions of combat readiness</i>	14
3.4.2. <i>Army commitment</i>	15
3.4.3. <i>Job satisfaction</i>	16
3.4.4. <i>Psychological distress</i>	17
3.5. Unit Differences on the Variables.....	18
4. SUMMARY AND CONCLUSIONS.....	19
5. REFERENCES.....	21

EXECUTIVE SUMMARY

SUBJECT: Executive summary of the human dimensions baseline assessment for the 75th Ranger Regiment

1. PURPOSE. To highlight the key findings of the Department of Operational Stress Research (DOSR) baseline assessment of the 75th Ranger Regiment.

2. BACKGROUND. On 19 March 98 MAJ Campbell and CPT Britt briefed the commander of the 75th Ranger Regiment on the mission of the Department of Operational Stress Research (DOSR) and potential ways the department could contribute to the mission of the Regiment. In the discussions that followed the briefing, the most immediate project was a baseline assessment of the Ranger Regiment on the measures used by the DOSR to study the human dimensions of soldier stress and performance. This baseline assessment would determine where the Regiment stands "at rest" on such factors as unit cohesion, perceptions of readiness, morale, and psychological health, so that the effects of further training exercises and deployments on these dimensions could be examined.

3. METHOD. Rangers completed a survey assessing the human dimensions listed above. Responses of the Rangers were compared to two samples of Mechanized Infantry soldiers also assessed in garrison. The assessment was conducted for the 1-75th and 2-75th battalions in July of 1998, and the 3-75th Battalion in November of 1998. For the 2-75th and 3-75th battalions, feedback was provided to battalion NCOs less than 14 hours after data collection. As a function of the battalion training schedule, the surveys for the 1-75th were mailed to the DOSR, and a briefing was mailed to the Battalion Surgeon's Office. The total sample for the Regiment was 1,028, with a total response rate of 62%.

3. KEY FINDINGS. For purposes of this summary, the results are broken down into Work Environment, Horizontal and Vertical Cohesion, Organizational Outcomes, and Unit Differences.

a) Work Environment: Rangers did not report working more hours or sleeping less than the comparison units. However, they did report less stress from working long hours and lack of sleep than did soldiers in the comparison units. In general, Rangers reported less stress in different areas than the comparison units. Furthermore, Rangers scored higher in perceptions of the significance of their job in accomplishing the unit's mission than the comparison units.

b) Horizontal Cohesion and Vertical Cohesion: Rangers scored higher than the comparison units in horizontal cohesion (soldier-to-soldier bonding) and vertical cohesion (ratings of NCO and Officer leadership). In terms of vertical cohesion, the difference between Rangers and the comparison units was especially strong for ratings of NCO leadership, with Rangers rating their NCO leadership much higher than the comparison units.

c) Organizational Outcomes: Rangers scored much higher than the comparison units in perceptions of the extent to which their unit was prepared to go into battle. Rangers were "at the

top” of the scale in their belief their unit would be effective in combat. Rangers also evidenced higher commitment to the Army than the comparison units, and reported greater job satisfaction than the comparison units. Finally, Rangers had lower levels of hostility, depression, and anxiety as the comparison units.

d) Unit Differences: When unit differences (platoon-level) on the human dimensions were examined, there was surprising homogeneity across the Ranger Regiment. The one dimension that showed strong unit differences was perceptions of officer leadership. This suggests that units did differ on their tendency to rate their officers as caring about them and providing appropriate structure. There was a lesser tendency for units to also differ on perceptions of combat readiness. Interestingly, ratings of officer leadership and perceptions combat readiness were correlated at the platoon level.

4. **CONCLUSIONS**: The results of the baseline assessment provide indicators of where Rangers stand on key human dimension measures when they are “at rest,” or not involved in a training exercise or mission. The utility of such an assessment is shown by the fact that Rangers score higher on most human dimensions than comparison units when they are at rest. The Ranger Regiment scored higher than the comparison units on perceptions of task significance, horizontal and vertical cohesion, army commitment, job satisfaction, and perceptions of combat readiness. Furthermore, Rangers reported less stress a function of working long hours and not getting enough sleep. Interestingly, there were few unit differences on the human dimensions, indicating relatively homogenous responding across the Regiment. The present assessment provides the groundwork for tracking dimensions important to performance, and examining potential factors that improve or degrade the Regiment’s standing on the dimensions. The present research consisted entirely of “self-report” assessments of the human dimensions. It would be worthwhile to examine more “objective” indexes of performance (e.g., ratings of performance by the Ranger’s immediate NCO or Officer, performance on training tasks, retention rates), and to examine whether the human dimensions assessed in the present research are capable of predicting these objective indexes of performance in the regiment. The POC for the baseline assessment is CPT Thomas Britt, DSN 295-7816, COMM (301) 205-7816, e-mail: brittt@wrsmtt-cmail.army.mil. Please contact me if you have any further questions.

1. INTRODUCTION

1.1 Background

As the Army prepares for the 21st century, issues surrounding the “human dimensions” of combat and operations other than war are becoming more important than ever before. The Army After Next will be characterized by small teams performing highly complex tasks, with individual soldiers having increased responsibility for relatively autonomous actions and decisions (Belenky, 1998). Units in the Special Operations Command (SOCOM), being the elite units in the Army, will likely deal with the stressors of the future Army long before more conventional units. In order to examine how such factors as operational tempo, personnel tempo, and increased responsibility will affect the performance and health of SOCOM units, it is essential to establish baseline values regarding where soldiers stand on human dimensions such as morale, unit cohesion, leadership, combat readiness, and psychological and physical health.

Human dimensions assessments are designed to examine how changes in work environments influence soldiers and leaders, and have been an integral part of major Army initiatives for decades. These assessment efforts vary in terms of their breadth and focus. In the 1980s, the Walter Reed Army Institute of Research (WRAIR) conducted longitudinal assessments of the Army’s New Manning System and Unit Manning System to examine the effects of keeping soldiers with their units for an extended period of time on unit cohesion and readiness (Marlowe, 1986; Vaitkus & Griffith, 1990).

In the 1990s, human dimensions assessments have been conducted during every major deployment of U.S. troops, including the Persian Gulf deployment (Stretch, Bliese, Marlowe, Wright, Knudson, & Hoover, 1995), the peacekeeping missions in Somalia (Gifford, 1993) and Haiti (see Halverson, Bliese, Moore, & Castro, 1995; Halverson & Bliese, 1996), humanitarian missions in the former Soviet Republics (Britt & Adler, in press), and most recently the peacekeeping mission in Bosnia (Britt, 1998a; Campbell, Ritzer, Valentine, & Gifford, 1998). Typically, human dimensions researchers deploy in support of the given operation, collect data in the field, and provide a briefing to commanders in the field within 48 hours of data collection. The results of these assessments are used to provide concrete advice to leaders regarding actions that can be taken to increase morale and improve performance (Britt, 1998b).

Although WRAIR researchers have collected a great deal of information from conventional Army units, less data has been collected from elite SOCOM units. In one of the few efforts in this regard, Manning and Fullerton (1988) examined unit cohesion and psychological health among Special Forces units. These authors found that Special Forces A-Team units had higher unit cohesion and stronger psychological health than Special Forces support units or conventional Infantry units. Although this research began to fill an important gap in our knowledge of elite Army units, the study examined only a limited number of human dimensions. Furthermore, this research did not assess Ranger units within the SOCOM command.

1.2 Statement of the Problem

Currently, no information exists on where Ranger units stand on factors such as unit cohesion, perceptions of leadership, perceptions of combat readiness, amount of sleep, work hours, or psychological health. Therefore, in order to track these factors over time and determine events that affect these variables, baseline values of Rangers “at rest” need to be determined. Once baseline values have been established, we will be in a position to assess changes in these variables as a function of such factors as operational tempo, force modernization, increased workload, etc.

1.3 Objectives

This human dimensions assessment of the 75th Ranger Regiment had two objectives, one primary and one secondary:

- The primary purpose of the present research was to establish where Rangers stand on key human dimensions when they are in garrison. To provide some comparison by which to evaluate the baseline assessment of the Rangers, the results for the Rangers are compared to samples of mechanized infantry soldiers assessed in garrison. Furthermore, differences among units at the platoon-level within the Regiment were also examined.
- A secondary purpose of the present research was to examine unit differences among the Rangers at the platoon level. That is, do platoons reliably differ in their perceptions of combat readiness or horizontal cohesion?

2. METHODOLOGY

2.1 Human Dimensions Assessed

Figure 2.1.1 provides a working model for our assessment of human dimensions. The human dimensions we examined can be divided into predictors, buffers, and outcomes.

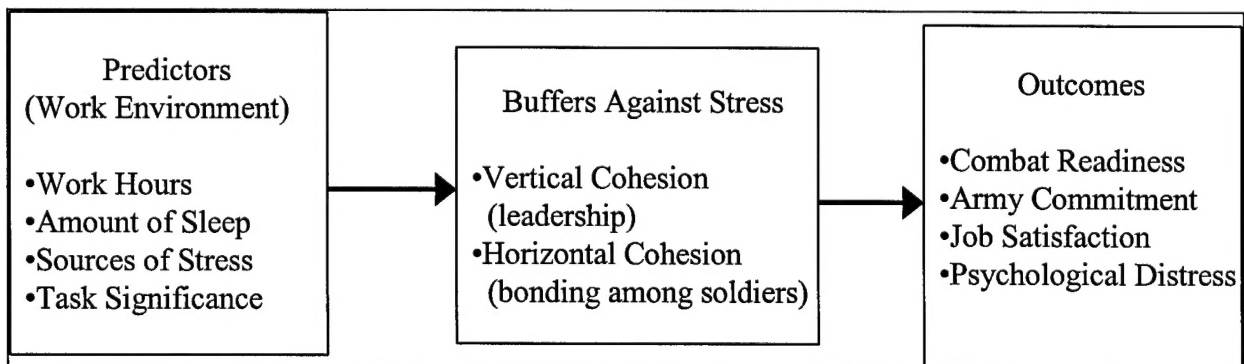


Figure 2.1.1

Predictors are those dimensions that have been shown to be related to important organizational outcomes. Most of the predictors we examine focus on the quality of the individual's work environment (number of hours worked, amount of sleep, task significance, sources of stress).

Buffers are factors that serve to protect individuals from a stressful environment. The key buffers assessed in the present research were horizontal cohesion (the bonding among soldiers in their immediate unit) and vertical cohesion (trust and confidence in unit leaders). **Outcomes** are those factors that depend on the quality of the work environment, as well as other factors. The key outcomes measured in the present research were perceptions of combat readiness, army commitment, job satisfaction, and psychological distress.

2.2 Data Analytic Strategy

In the present research we compared the responses of the Ranger Regiment on the predictors, buffers, and outcomes to the responses of two control groups. The control groups were both Mechanized Infantry units that were also assessed in garrison. In addition, we conducted a "platoon-level" analysis of the data, examining whether unit differences existed on the human dimensions. For example, do platoons differ on combat readiness or horizontal cohesion?

2.3 Data Collection

The human dimensions were assessed by having Rangers complete a survey at their home station. The survey took approximately one hour to complete. The procedure for surveying the 2-75th and 3-75th battalions was slightly different from the procedure for surveying the 1-75th battalion. In all cases points of contact from each battalion were briefed on the purpose and importance of the baseline assessment, and were given guidelines for administration of the surveys. An attempt was made to survey all Rangers who were in garrison at the point the surveys were administered. For the 2-75th and 3-75th battalions, battalion POCs were briefed by a research psychologist from WRAIR (CPT Britt) and the POCs then administered the surveys through their chain of command. Rangers returned the surveys by 1500 hours the following day. The surveys were then electronically processed and analyzed, and a briefing was prepared for a battalion POC for the following morning. A time span of approximately 14 hours elapsed between the receipt of the surveys and the finished briefing, allowing for rapid feedback to the battalion commanders. The procedure was similar for the 1-75th battalion. However, because a sizeable percentage of the battalion was away on a training exercise, the surveys were completed and then mailed to WRAIR. The surveys were then processed and a briefing and executive summary were mailed to the unit POC. The 1-75th and 2-75th battalions were surveyed in July of 1998. The 3-75th battalion was surveyed in November of 1998.

After screening the survey data to take into account missing and incorrect responses, the data were subjected to standard methods of descriptive and inferential statistics. The responses given to individual survey items were aggregated into mean scale values for each respondent. The scales of interest and the individual survey items that comprise each different scale will be described below as they are reported.

3. RESULTS

In presenting the results of the baseline assessment, we organize the presentation of the findings into the following categories: (a) Response Rate and Demographics (b) Work Environment (c) Horizontal and Vertical Cohesion (d) Organizational Effectiveness Indices (e) Unit Differences on the Variables (f) The Prediction of Morale and Combat Readiness. For sections (a) through (d), the responses of the Ranger Regiment are compared to the two comparison groups of mechanized infantry units. When an analysis of a given variable indicated a significant and strong effect of rank, we show the results as a function of rank.

3.1 Response Rate and Demographics

3.1.1 Response Rate. Across the three Battalions, the total number of completed surveys was 1,028, with a response rate of 62%. This percentage is a conservative estimate, given that we cannot be sure that all of the surveys given to the unit POCs were actually administered to the Rangers.

3.1.2 Demographics. In terms of Rank, the sample was 68% PFC-SPC, 28% SGT-MSG, and 5% 1Lt-CPT (note percentages may add up to slightly higher than 100% as a function of rounding). In terms of Ethnicity, the sample was 84% White, 7% Hispanic, 3% Black, and 6% other. In terms of Marital Status, 64% of the sample was single, 32% of the sample was married, and 3% of the sample was divorced. 22% of the sample indicated having one more children at home. In terms of prior deployment to major operations, 8% of the Rangers indicated being deployed to Operation Restore Democracy, and 4% indicated being deployed to Operation Desert Storm. In terms of length of time in current unit, 35% reported being in their unit for more than 2 years, 13% for 19-24 months, 17% for 13-18 months, 17% for 7-12 months, 12% for 4-6 months, and 7% for 0-3 months. The average age of the sample was 23.62 years.

3.2 Work Environment

The work environment of an individual can have a dramatic effect on the individual's health and performance (Jex, 1998). Individuals working in a stressful environment where their contributions are not recognized tend to perform worse than individuals who are in a less stressful environment and who receive recognition for what they do (Jex, 1998). In the present research we assessed the quality of the work environment by examining the number of hours Rangers reported working, the number of hours they reported sleeping, sources of stress they experienced in their lives, and their perceptions of the significance of their work. In prior human dimension assessments, these factors have often been associated with the psychological well-being of unit members. That is, increased work hours, lack of sleep, low task significance, and the stress caused by different factors have been associated with lower psychological health among soldiers (see Bliese & Halverson, 1996).

3.2.1 Work hours and Amount of Sleep. As seen in Figure 3.2.1, Rangers did not differ from the comparison units in number of work hours per day or hours sleep per night. The average

number of hours worked per day across ranks was 11.46, and the average amount of sleep per night was 5.43 hours. There was no effect of rank on amount of sleep. There was a small effect of rank on number of hours worked, with officers reporting working more hours (Mean = 12.57) than NCOs, and NCOs reporting working more hours (Mean = 11.68) than junior enlisted Rangers (Mean = 11.27).

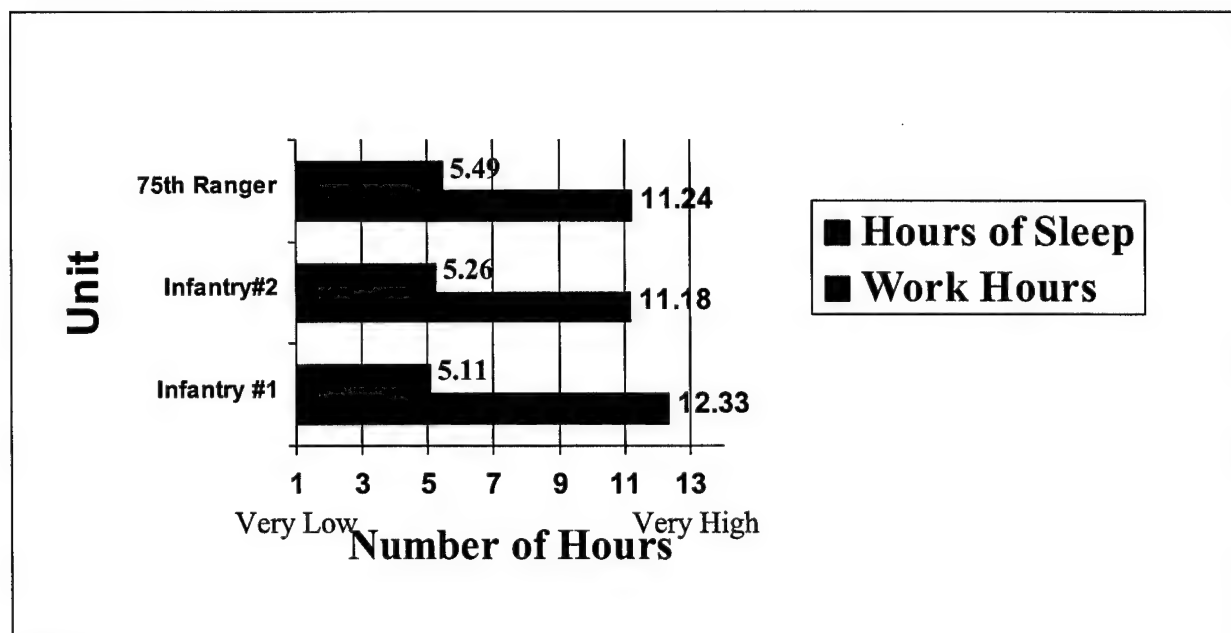


Figure 3.2.1

3.2.2 Sources of Stress. As seen in Figure 3.2.2, Rangers reported less stress as a function of number of hours worked and lack of sleep than the comparison units.

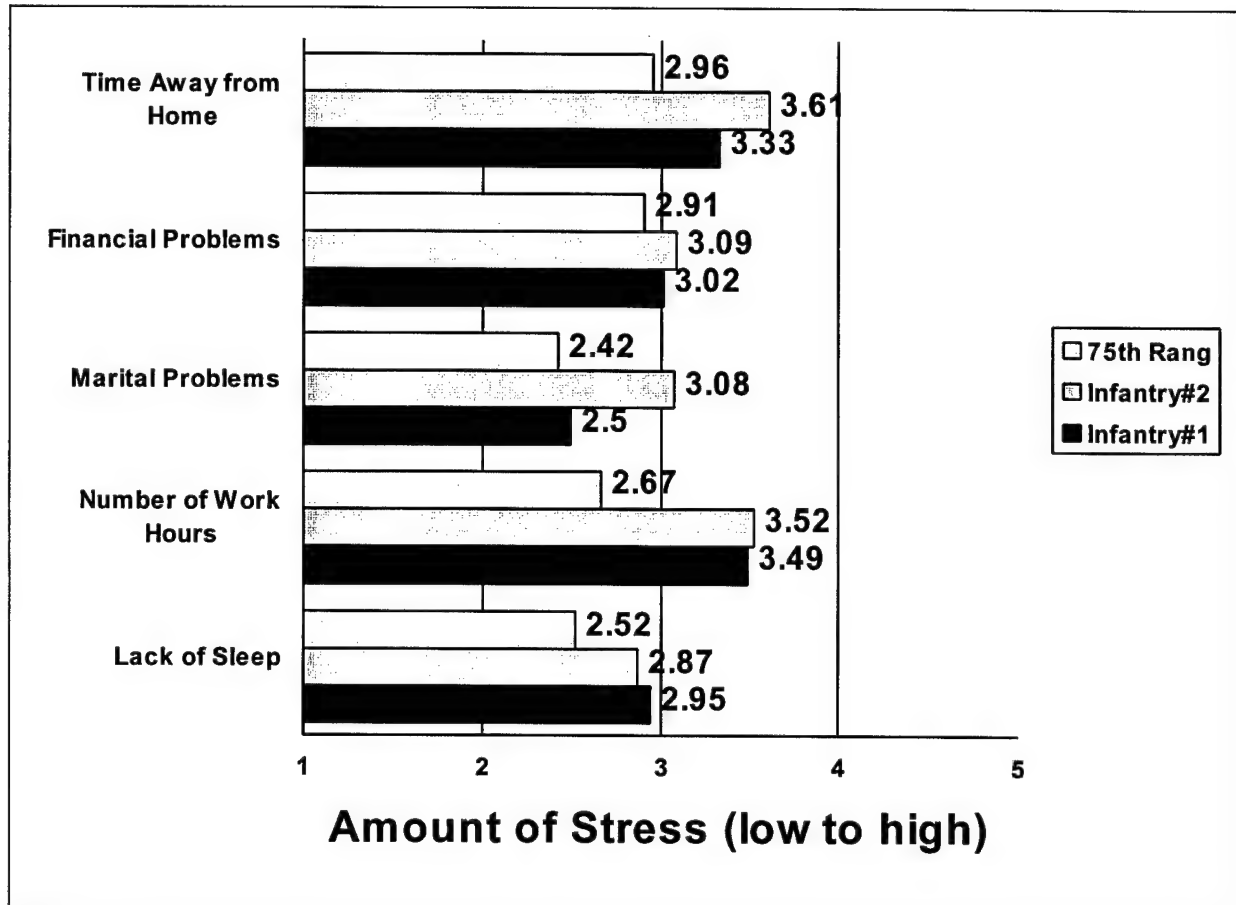


Figure 3.2.2

This suggests that although Rangers were working the same number of hours and getting the same amount of sleep as the comparison units, they were less bothered by work hours and lack of sleep. This finding illustrates the utility of the transactional approach to stress (Lazarus & Folkman, 1984), which argues that the same environmental stressor may be perceived differently by people depending on their subjective experience of the stressor. In the present case, Rangers reported less stress as a function of work hours and lack of sleep, even though the “objective” number of hours worked and hours slept was the same as with the comparison units.

Figure 3.2.2 also provides the results for other potential stressors, and illustrates that Rangers reported less stress than the comparison units in the areas of marital problems and time spent away from home.

3.2.3 Task Significance. A three-item scale was used to assess task significance, with a reliability of .84. Examples of items used to assess task significance are “What I do help accomplish my unit’s mission” and “I feel that what I am doing is important for accomplishing my unit’s mission.” Figure 3.2.3 shows the results for task significance.

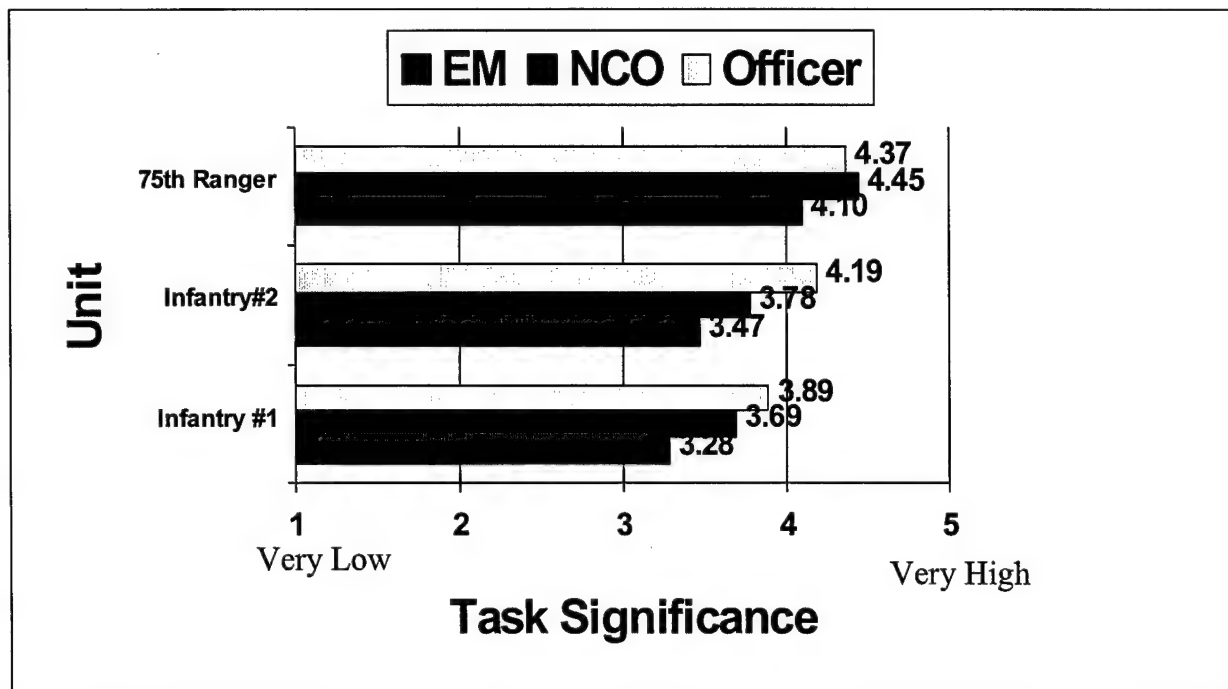


Figure 3.2.3

As seen in the figure, although there was an effect of rank on perceptions of task significance, all Rangers exhibited a strong belief that what they were doing was important in accomplishing the unit's mission. This belief was exceptionally strong for the NCOs and officers. Furthermore, the Rangers scored significantly higher than the comparison units in their perception that what they were doing was influential in helping the unit accomplish its mission. This finding is important, because when individuals believe they are making a contribution to accomplishing an important goal, they are more likely to persevere in the face of obstacles to achieve that goal (Shepperd, 1993).

3.3 Horizontal and Vertical Cohesion

Horizontal cohesion refers to the amount of bonding between soldiers at the unit level (Manning & Fullerton, 1988). Past research has shown that horizontal cohesion is a strong predictor of performance, motivation, and psychological health, both during combat and in garrison (Manning & Fullerton, 1988; Shay, 1994; Solomon, Mikulincer, & Avitzur, 1988). Vertical cohesion refers to the amount of trust and confidence Rangers have in their NCOs and officers (Bliese & Halverson, 1996). A large amount of research indicates the importance of vertical cohesion in organizational effectiveness (Bass, 1996).

3.3.1 Horizontal Cohesion. Horizontal cohesion was assessed by a five item scale with an internal consistency of .81. Examples of items from the scale include "My closest relationships are with the soldiers in my unit" and "There are soldiers in my unit that I can go to for help when I have a personal problem." Figure 3.3.1 presents the results for horizontal cohesion as a function of rank for both the Regiment and the comparison units.

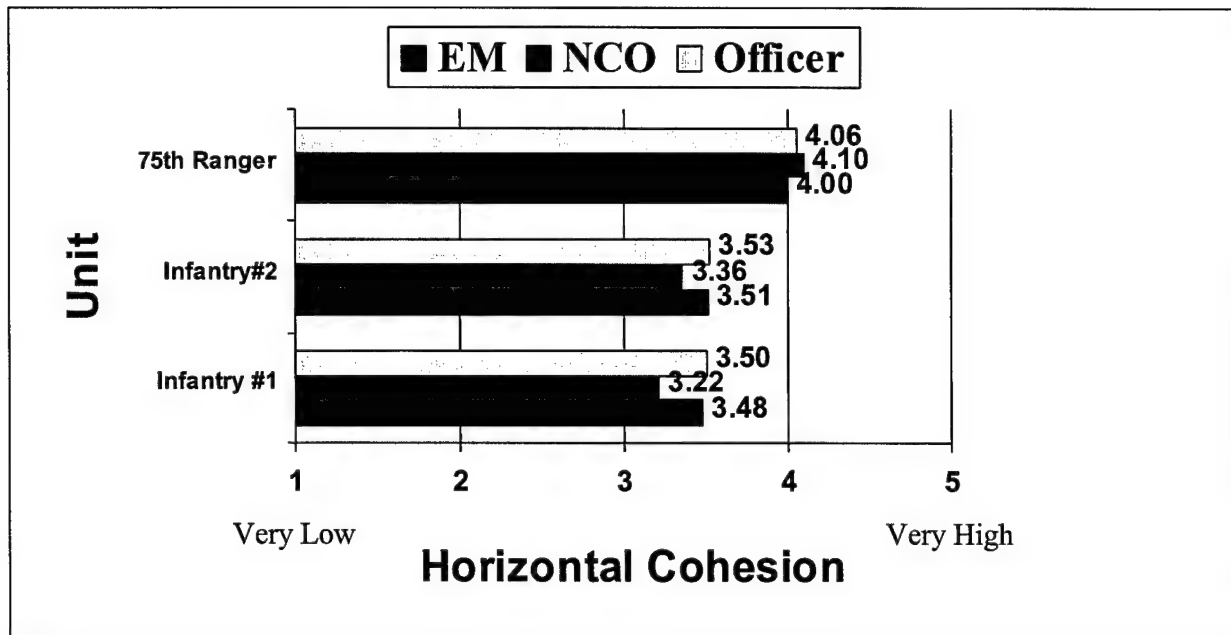


Figure 3.3.1

It is immediately clear that the Rangers scored higher than the comparison units across ranks on horizontal cohesion. Interestingly, although there were differences among ranks in the comparison units, with NCOs reporting lower cohesion than officers or junior enlisted, there were no differences in unit cohesion among the Rangers. This suggests that across ranks, the level of bonding among unit members is much higher in Ranger Units than in conventional Infantry units. This replicates the results that Manning and Fullerton (1988) found with Special Forces units.

3.3.2 Vertical Cohesion. In presenting the results for vertical cohesion, we limit the sample to the junior enlisted Rangers. The amount of trust and confidence in unit NCOs and Officers (vertical cohesion) was assessed by two six item scales. The two scales contained the same items, but the referent (NCOs versus Officers) was different for the two scales. The internal consistency of the scale assessing NCO leadership was .89, and the internal consistency for the scale assessing officer leadership was .89. Examples of items for the two scales include "The officers [NCOs] in my unit establish clear work objectives" and "The officers [NCOs] in my unit are interested in my personal welfare." Figure 3.3.2 presents the results on the two scales for the regiment.

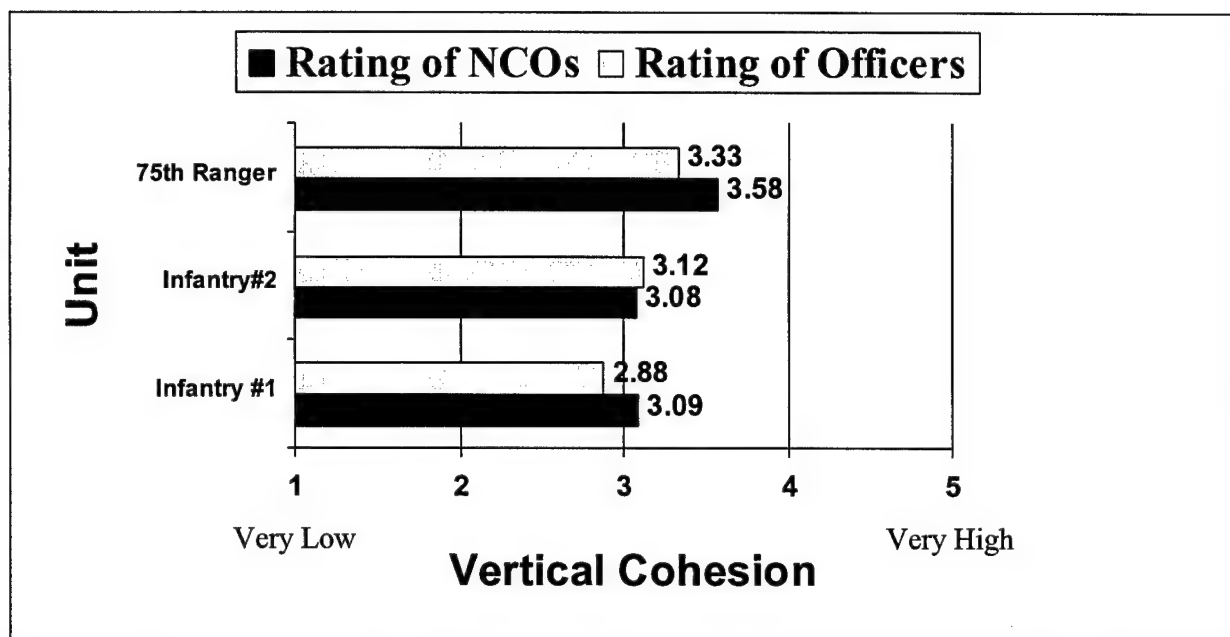


Figure 3.3.2

As seen in the figure, ratings of officer and NCO leadership were higher for the Rangers than for the comparison units, but the effect was especially strong for ratings of NCO leadership. That is, junior enlisted Rangers were especially likely to rate their NCO leadership as stronger than the junior enlisted members of the comparison units. This finding illustrates the importance of distinguishing ratings of NCOs and Officers when assessing leadership.

3.4 Organizational Outcomes

In the previous two sections, we assessed factors that have been shown in organizational research to be significant predictors of organizational effectiveness. In this section, we examine four indices of organizational effectiveness. These indices are: (1) Perceptions of Combat Readiness (2) Army Commitment (3) Job Satisfaction, and (4) Psychological Distress.

3.4.1 Perceptions of Combat Readiness. The first index of organizational effectiveness was perceptions of combat readiness. A guiding assumption in our research is that when soldiers believe they can perform effectively in combat, they will in fact perform better than if they doubt their ability. In their classic study of the American Soldier in World War II, Stouffer et al. (1949) found that confident units were less likely to encounter fatalities than less confident units, and considered this finding the highlight of their research. Perceptions of combat readiness were assessed with a 4-item scale used in past research, and modeled after the seminal work of Stouffer et al. (1949). Rangers were asked to indicate the extent to which they agreed or disagreed with the following statements: (1) I think my unit would do a better job in combat than most U.S. Army units, (2) I think the level of training in this company is high, (3) I have real confidence my unit's ability to perform its mission, and (4) If we went to war tomorrow, I would feel good about going with my unit. These items were averaged to create a combat readiness scale. The reliability of the scale was .79.

The results for perceptions of combat readiness as a function of rank are presented in Figure 3.4.1 for both the Ranger Regiment and the comparison units.

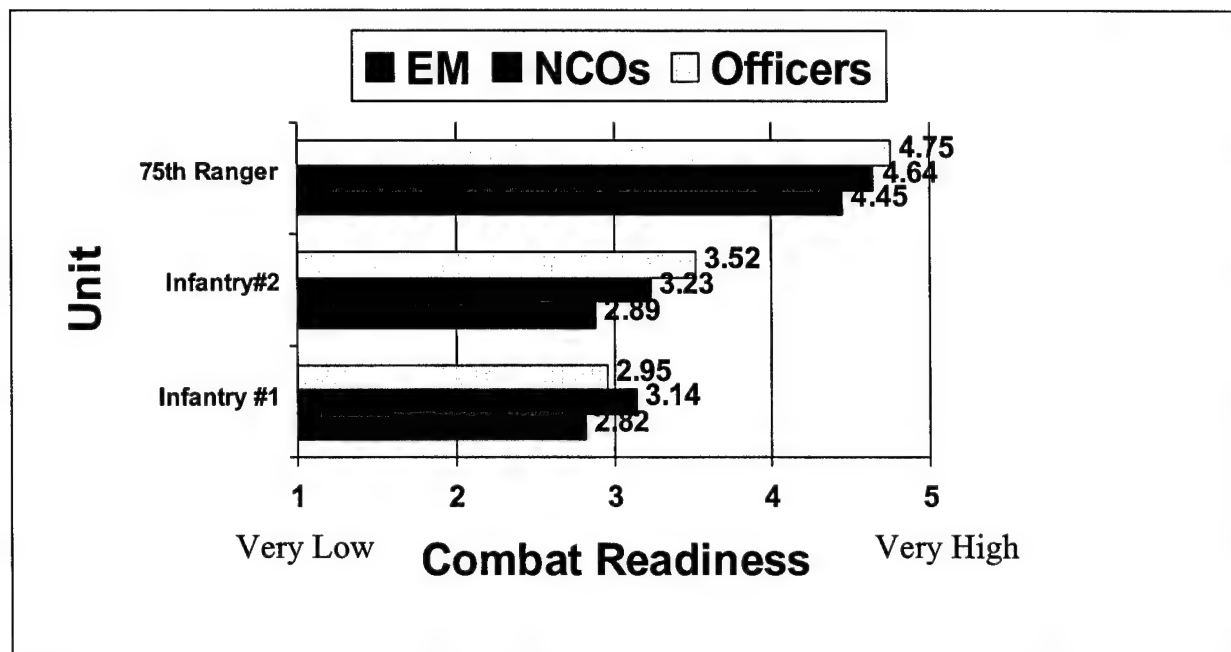


Figure 3.4.1

The figure indicates a dramatic difference between the Rangers and the comparison units in the perception that the unit is prepared to perform well in combat. In fact, the responses for the Ranger Regiment were at the very top of the scale assessing combat readiness. The figure also indicates that there were rank differences in perceptions of combat readiness, both in the Ranger Regiment and the comparison units. The source of the rank difference in the Ranger regiment was the tendency for junior enlisted Rangers to report lower combat readiness than NCOs or Officers. Still, the dramatic effect of increased perceptions of combat readiness in comparison to the Infantry units was apparent at all levels of rank.

3.4.2 Army Commitment. A second index of organizational effectiveness was army commitment. Army commitment refers to a soldier's pride for and commitment to the Army. In the civilian literature this concept is often referred to as "organizational commitment." High organizational commitment has been associated with increased morale, decreased absenteeism, and higher performance (Meyer & Allen, 1997). Army Commitment was assessed using a three-item scale derived from Mowday, Porters, and Steers (1982). The three items are: (1) I talk up the Army to my friends as a great organization, (2) I am proud to tell others that I am part of the Army, and (3) I really care about the fate of the Army. Responses to these three items were averaged together to create a Army Commitment scale. The reliability of the scale in the present study was of .77.

The results for army commitment as a function of rank are presented in Figure 3.4.2. As seen in the figure, and as one might expect, army commitment differed as a function of rank for both the Ranger Regiment and the Infantry comparison units.

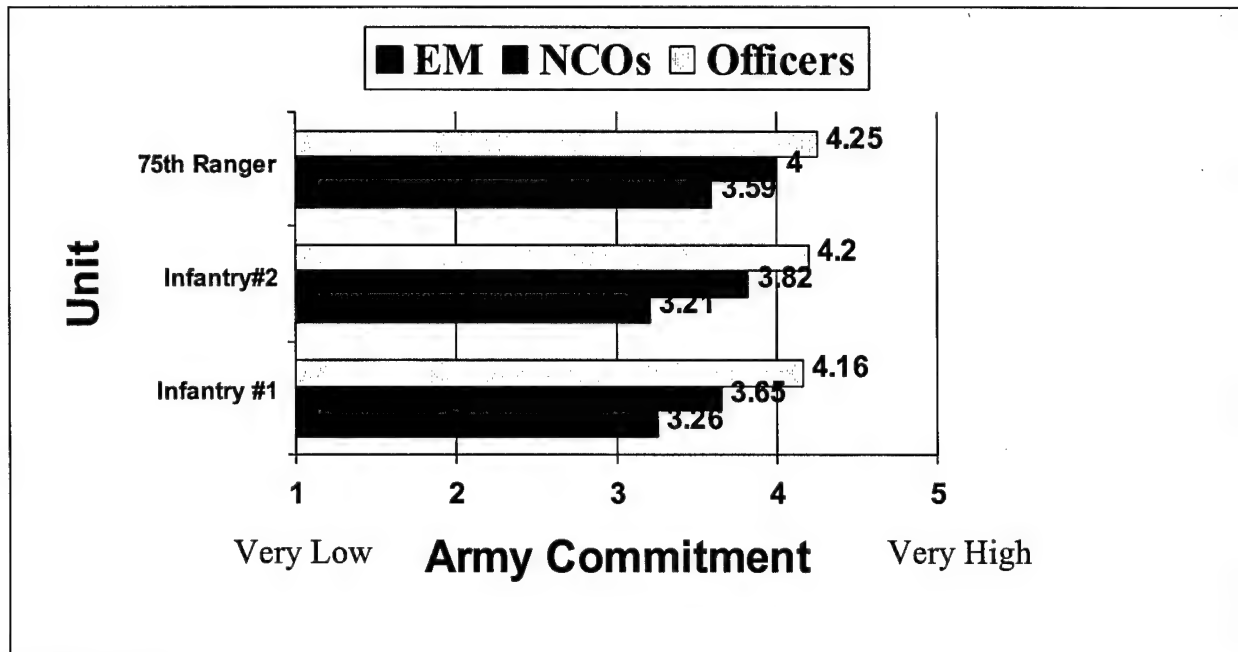


Figure 3.4.2

In general, the Rangers were higher than the comparison units in Army commitment. However, this was especially true for the junior enlisted Rangers and NCOs. The officers in the Ranger Regiment were not significantly different from the comparison units in terms of Army commitment. However, officers in all samples reported a high level of Army commitment.

3.4.3 Job Satisfaction. The third index of organizational effectiveness was job satisfaction. Past research has indicated that job satisfaction is associated with a host of beneficial outcomes, including decreased absenteeism and enhanced performance (Spector, 1997). Job satisfaction was assessed using a modified version of the Job Diagnostic Survey General Satisfaction Scale (Hackman & Oldham, 1975). The scale contained three items: (1) I am very satisfied with my job in the Army, (2) I like my job in the Army, and (3) I am satisfied with the kind of work I do on my job. The reliability of the scale in the present sample was .85.

The results for job satisfaction as a function of rank are given in Figure 3.4.2 for the Ranger Regiment and the comparison units. The figure indicates that Rangers of all ranks reported being more satisfied with their jobs in comparison to Infantry soldiers of the same rank.

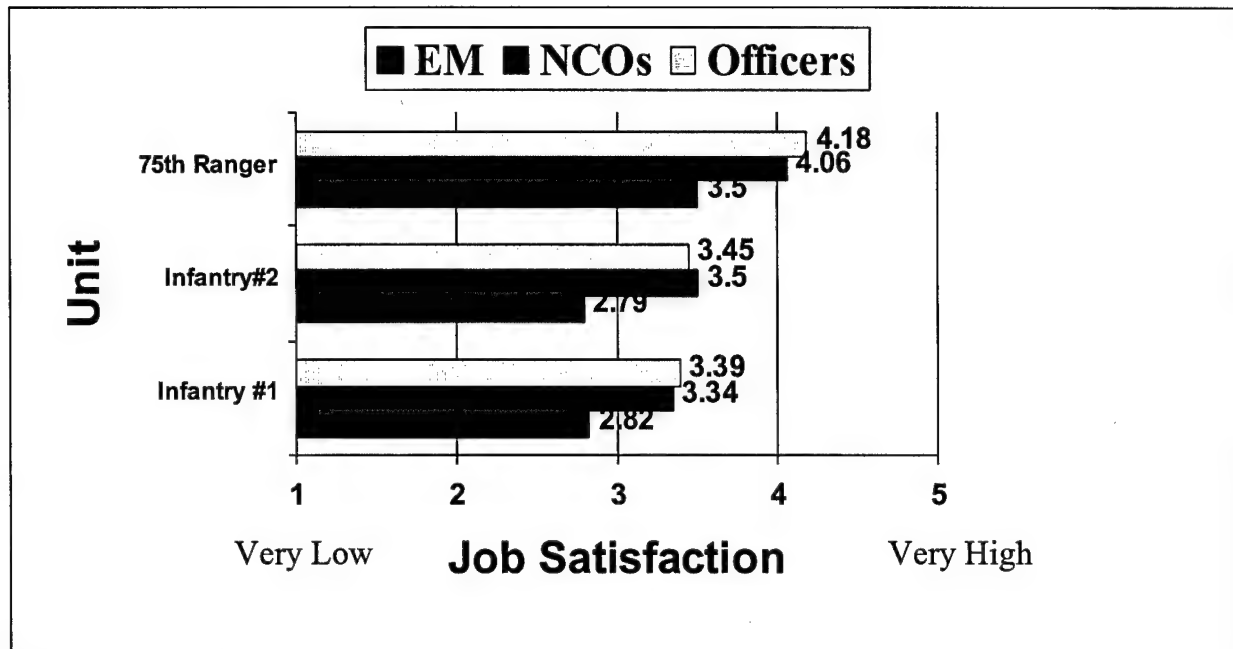


Figure 3.4.3

Across all samples, junior enlisted soldiers and Rangers reported a lesser degree of satisfaction with their jobs than NCOs or Officers, and officers were slightly more satisfied than NCOs. These results indicate high levels of job satisfaction among Rangers in comparison to traditional Infantry units.

3.4.4 Psychological Distress. Our fourth index of organizational effectiveness was psychological distress. Our assessment of psychological distress was derived from the Brief Symptom Inventory (BSI, Derogatis, & Spencer, 1982). The BSI is a 53-item measure of psychological distress derived from the 90-item Symptom Checklist-Revised (SCL-90-R; Derogatis, 1977). The BSI has been used extensively in both research and clinical practice to assess psychological distress. In the present sample we assessed the following subscales of the BSI: Depression, Anxiety, and Hostility.

Figure 3.4.4 presents the results for the three distress measures for the Ranger Regiment and the comparison units. In all cases levels of psychological distress were fairly low.

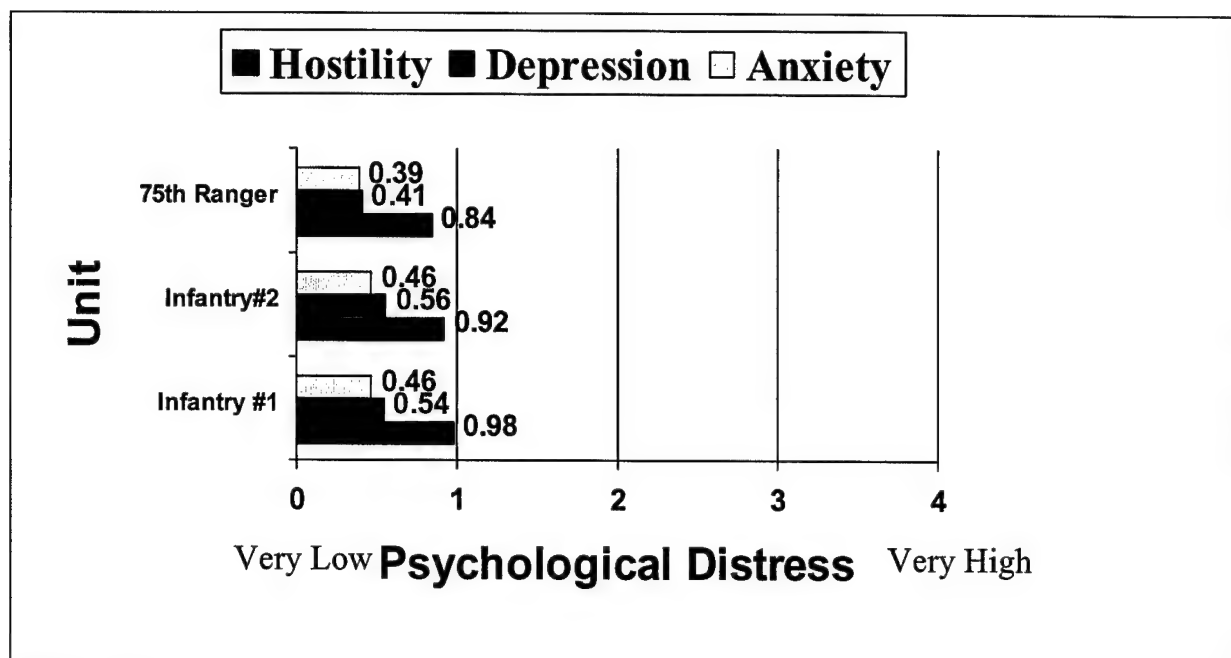


Figure 3.4.4

The results indicated that the Rangers scored slightly lower than the comparison units on hostility, depression, and anxiety. Although not indicated in the Figure, junior enlisted Rangers scored higher than NCOs on the measures of distress, and NCOs scored higher than officers. However, the levels of distress for all ranks were fairly low.

3.5 Unit Differences on the Variables

Researchers at WRAIR have capitalized on and contributed to recent developments in group-level analysis, and have begun to systematically examine differences among military units on important human dimensions (see Bliese, 1998, Bliese & Halverson, 1996). One of the central goals of group-level analysis is to examine whether there are “group” properties to the data; that is, do groups (however defined) reliably differ on the dimensions being examined. In the present study we aggregated the responses of the Rangers at the platoon level, with a total of 42 platoons across the regiment containing 8 or more Rangers. We then examined which human dimensions differed significantly across platoons.

These analyses revealed a surprising homogeneity among the platoons across the Regiment. However, there were two dimensions that showed reliable group differences: Ratings of leadership for officers and combat readiness (the platoon differences were strongest for ratings of officer leadership). That is, the ratings of officers and perceptions of combat readiness differed reliably across the different platoons. Interestingly, group differences were not reliable for ratings of NCO leadership. Given that ratings of officer leadership and combat readiness were the only dimensions that showed strong platoon level differences, we examined the relationship between these dimensions at the platoon level. Interestingly, the correlation between ratings of officer leadership and combat readiness was .63, indicating that at the platoon level, ratings of officer leadership were predictive of perceptions of combat readiness. This relationship is

plotted as a function of platoon in Figure 3.5.1. Further research needs to be conducted to assess whether differences in combat readiness in platoons are actually a function of officer leadership.

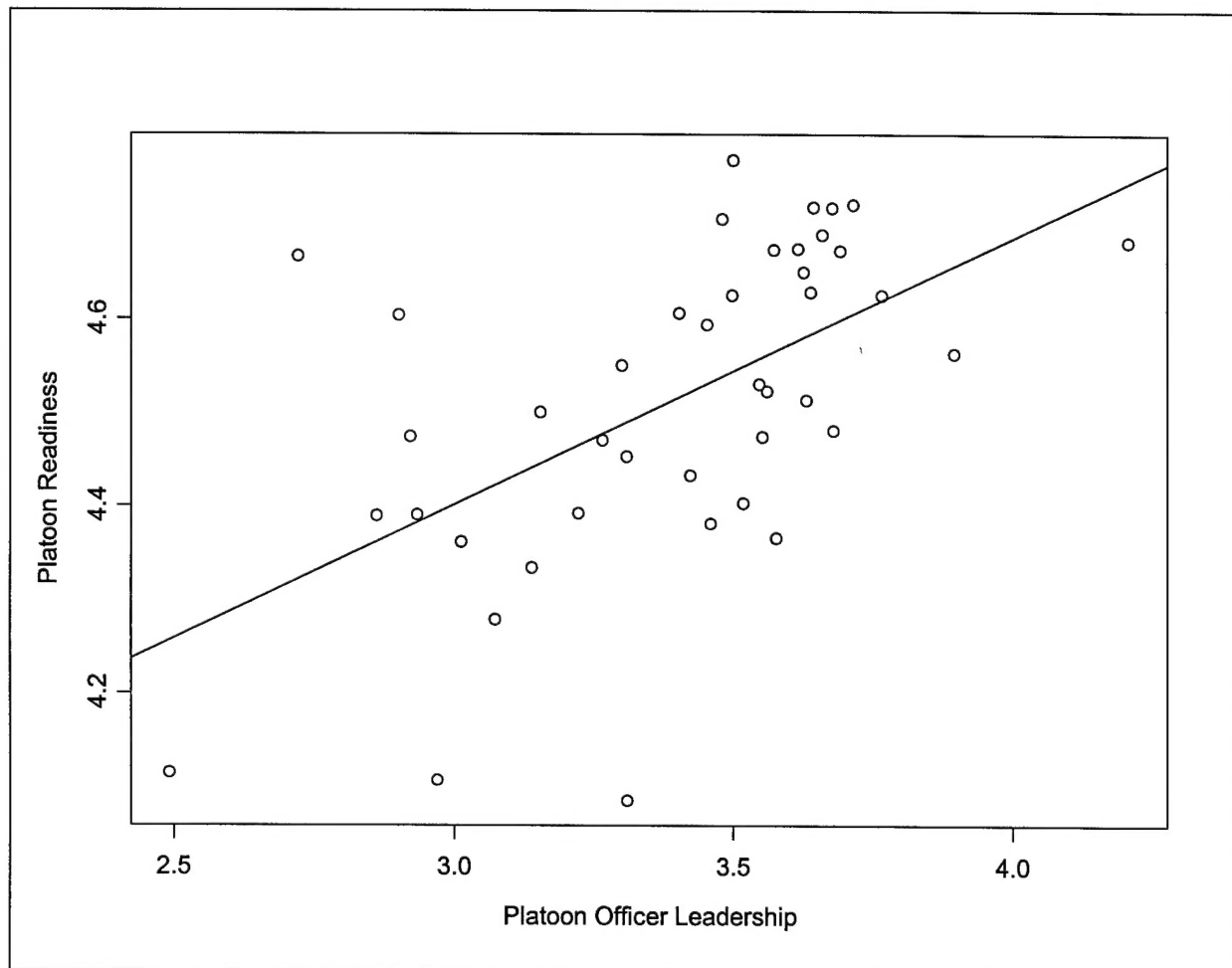


Figure 3.5.1

4. SUMMARY AND CONCLUSIONS

The results of the baseline assessment provide indicators of where Rangers stand on key human dimension measures when they are “at rest,” or not involved in a training exercise or mission. The utility of such an assessment is shown by the fact that Rangers score higher on most human dimensions than comparison units when they are at rest. The Ranger Regiment scored higher than the comparison units on perceptions of task significance, horizontal and vertical cohesion, army commitment, job satisfaction, and perceptions of combat readiness. Furthermore, Rangers reported less stress a function of working long hours and not getting enough sleep. Interestingly, there were few unit differences on the human dimensions, indicating relatively homogenous responding across the Regiment. However, platoons did reliably differ on ratings of officer leadership and combat readiness. These variables were also correlated across platoons. Future research may support targeted interventions at the platoon level to increase perceptions of combat readiness. The present research consisted entirely of “self-report” assessments of the human

dimensions. It would be worthwhile to examine more "objective" indexes of performance (e.g. ratings of performance by the Ranger's immediate NCO or Officer, performance on training tasks, retention rates), and to examine whether the human dimensions assessed in the present research are capable of predicting these objective indexes of performance in the Regiment. In conclusion, the present assessment indicates that the 75th Ranger Regiment is more cohesive, healthy, and ready for battle in comparison to conventional military units.

5. REFERENCES

- Bass, B.M. (1996). *A new paradigm for leadership: An inquiry into transformational leadership*. Alexandria, VA: US Army Institute for the Behavioral and Social Sciences.
- Belenky, G.B. (1988). Warfighter biomedical assessment in sustaining individual and unit effectiveness in Army After Next operations. *Unpublished Manuscript*. Walter Reed Army Institute of Research. Washington, DC.
- Bliese, P.D. (1998). Group size, ICC values, and group-level correlations: A simulation. *Organizational Research Methods, 1*, 355-373.
- Bliese, P. D. & Halverson, R. R. (1996). Individual and nomothetic models of job stress: An examination of work-hours, cohesion, and well-being. *Journal of Applied Social Psychology, 26*, 1171-1189.
- Britt, T.W. (1998a). Psychological ambiguities in peacekeeping. In H.J. Langholtz (Ed.), *The psychology of peacekeeping* (pp. 111-128). Westport, Connecticut: Praeger Publishers.
- Britt, T.W. (1998b). Responsibility, morale, and commitment. *Military Review, 77*-82.
- Britt, T.W., & Adler, A.B. (in press). Stress and health during medical humanitarian assistance missions. *Military Medicine*.
- Campbell, S.J., Ritzer, D.R., Valentine, J.N., & Gifford, R.K. (1998). Operation Joint Guard (SFOR) Bosnia: Assessment of operational stress and adaptive coping. *Unpublished Technical Report*. Walter Reed Army Institute of Research, Washington, DC.
- Derogatis, L. R. (1977). *The SCL-90 manual: Scoring, administration and procedures for the SCL-90*. Baltimore, MD: Johns Hopkins University School of Medicine, Clinical Psychometrics Unit.
- Derogatis, L. R. & Spencer, P. M. (1982). *The Brief Symptom Inventory (BSI), Administration, Scoring, & Procedures Manual-I*. Baltimore, MD: John Hopkins University school of Medicine, Clinical Psychometrics Unit.
- Gifford, R.K. (1993). *The U.S. Army in Somalia: Psychological aspects of Operations Restore Hope and Continue Hope*. NATO Stress Workshop, San Antonio, Texas.
- Hackman, J. R. & Oldham, G. R. (1975). Development of the Job Diagnostic Survey. *Journal of Applied Psychology, 60*, 159-170.
- Halverson, R. R. & Bliese, P. D. (1996). Determinants of soldier support for Operation Uphold Democracy. *Armed Forces and Society, 23*, 81-96.

Halverson, R. R., Bliese, P. B., Moore, R. E., & Castro, C. A. (1995). *Psychological well-being and physical health of soldiers deployed for Operation Uphold Democracy: A summary of human dimensions research in Haiti*. Alexandria, VA: Defense Technical Information Center (DTIC: #ADA298125).

Jex, S.M. (1998). *Stress and job performance: Theory, research, and implications for managerial practice*. Thousand Oaks, CA: Sage Publications.

Marlowe, D. H. (1986). *New manning system field evaluation (Technical Report No. 1)*. Washington, DC: Walter Reed Army Institute of Research.

Manning, F.J., & Fullerton, T.D. (1988). Health and well-being in highly cohesive units of the U.S. Army. *Journal of Applied Social Psychology*, 18, 503-519.

Meyer, J.P., & Allen, N.J. (1997). *Commitment in the workplace: Theory, research, and application*. Thousand Oaks, CA: Sage Publications.

Mowday, R., Porters, L., & Steers, R. (1982). *Employee-organization linkages: The psychology of commitment and turnover*. New York: Academic Press.

Shay, J. (1994). *Achilles in Vietnam: Combat trauma and the undoing of character*. New York, NY: Touchstone.

Shepperd, J.A. (1993). Productivity loss in groups: A motivation analysis. *Psychological Bulletin*, 113, 67-81.

Solomon, Z., Mikulincer, M., & Avitzur, E. (1988). Coping, locus of control, social support, and combat-related posttraumatic stress disorder: A prospective study. *Journal of Personality and Social Psychology*, 55, 279-285.

Spector, P.E. (1997). *Job satisfaction: Application, assessment, causes, and consequences*. Thousand Oaks, CA: Sage Publications.

Stouffer, S.A., Lumsdaine, A.A., Williams, R.B., Smith, M.B., Janis, I.L., Star, S.A., & Cottrell, L.S. (1949). *The American soldier: Combat and its aftermath, Volume II*. Princeton, NJ: Princeton University Press.

Stretch, R. H., Bliese, P. D., Marlowe, D. H., Wright, K. M., Knudson, K. H., & Hoover, C. H. (1996). Psychological health of gulf war era military personnel. *Military Medicine*, 161, 257-261.

Vaitkus, M., & Griffith, J. (1990). An evaluation of unit replacement on unit cohesion and individual morale in the U.S. Army all-volunteer force. *Military Psychology*, 2, 221-239.